DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-019868 Address: 333 Burma Road **Date Inspected:** 29-Jan-2011

City: Oakland, CA 94607

OSM Arrival Time: 1900 **Project Name:** SAS Superstructure **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: See Below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** OBG

Summary of Items Observed:

CWI Inspectors: Mr. Yu Jiao, Mr. Ji Cai Feng

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai China, for the purpose of monitoring welding and fabrication.

OBG Bay 14

This QA Inspector observed ZPMC welder Mr. Yan Yunfeng, stencil 215553 used shielded metal arc welding procedure WPS-345-SMAW-2G(2F)-FCM-Repair to make a weld repair of ultrasonic rejections to OBG segment 14E weld SEG3019L-1-085. ZPMC QC presented this QA Inspector with critical weld repair document B-CWR-2645 that documents this weld had been ultrasonically rejected. This QA Inspector measured a welding current of approximately 200 amps. This QA Inspector observed Mr. Yang Yunfeng appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Guo Taotao stencil 050969 used shielded metal arc welding procedure WPS-345-SMAW-3G(3F)-FCM-Repair-1 to make a weld repair of ultrasonic rejections to OBG segment 14E weld SEG3019K-011. ZPMC QC presented this QA Inspector with critical weld repair document B-CWR-2726 that documents this weld had been ultrasonically rejected. This QA Inspector measured a welding current of approximately 165 amps. This QA Inspector observed Mr. Guo Taotao appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

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This QA Inspector observed ZPMC welder Mr. Wang Zhengbin, stencil 216086 used shielded metal arc welding procedure WPS-B-P-2212-TC-U4B-FCM-1 to make OBG segment 14E weld SEG3019U-003. This QA Inspector observed ZPMC has measured a welding current of 205 amps. This QA Inspector observed Mr. Wang Zhengbin appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Zhu Jibo, stencil 055564 used flux cored welding procedure WPS-B-T-2233-ESAB to make OBG segment 13AE weld SEG3007AT-045. ZPMC QC had recorded a welding current of 247 amps and 25.2 volts. This QA Inspector observed Mr. Zhu Jibo appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Yuan Wensong, stencil 055491 used flux cored welding procedure WPS-B-T-2233-ESAB to make OBG segment 13AE welds SEG3007H-097 and 101. ZPMC QC had recorded a welding current of 253 amps and 25.1 volts. Mr. Yuan Wensong appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder stencil 037773 used flux cored welding procedure specification WPS-B-T-2133-ESAB to perform OBG segment 14E weld DP3160-001-135. This QA Inspector measured a welding current of approximately 250 amps, 26.5 volts and the base materials had been preheated with electric heating elements. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Ye Bing stencil 066733 used flux cored welding procedure specification WPS-B-T-2133-ESAB to perform OBG segment 14E weld DP3160-001-134. This QA Inspector measured a welding current of approximately 250 amps, 26.5 volts and the base materials had been preheated with electric heating elements. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Qie Jian Zhou, stencil 067571 used shielded metal arc welding procedure specification WPS-B-P-2214-TC-U4B-FCM-1 to make OBG segment 14E weld SEG3019AG-045. This QA Inspector measured a welding current of approximately 135 amps and Mr. Qie Jian Zhou appeared to be certified to make this weld. ZPMC used electric heaters to preheat the base material of this weld joint. Items observed on this date appeared to generally comply with applicable contract documents.

WELDING INSPECTION REPORT

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Summary of Conversations:

See Above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact James Devey +8615000026784, who represents the Office of Structural Materials for your project.

| Inspected By: | Dawson,Paul | Quality Assurance Inspector |
|---------------|-------------|-----------------------------|
| Reviewed By: | Riley,Ken | QA Reviewer |